# THE ACCESS ROAD PROGRAM OF THE U.S. ATOMIC ENERGY COMMISSION IN ARIZONA

by

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#### INTRODUCTION

The exploration activities of the U.S. Atomic Energy Commission (AEC) including exploration drilling, aerial radiometric surveys, and geophysical surveys, during the 1950's are well documented in reports issued by the AEC. The program of constructing and improving access roads to exploration and mining areas is less known.

During the period 1951-1958, some 90 projects totalling 1,253 miles of roads were improved in Arizona, Colorado, New Mexico, South Dakota, Utah, and Wyoming. Total cost of these projects was \$17 million of which \$14 million was provided by the AEC. The remaining \$3 million came from state and federal funds (O'Rear, 1966, pg. 13).

AEC documents recently located in the U.S. Department of Energy archives at the Grand Junction Project Office, gave some details of the access road program in Arizona.

#### ACCESS ROADS IN ARIZONA

In Arizona seven projects were carried out. Five were in Apache County and two were in Gila County. All projects in Apache County were on the Navajo Indian Reservation and were contracted to the Roads Department of the Bureau of Indian Affairs, U.S. Department of the Interior. The two projects in Gila County were contracted to Nafziger Tillage Service, Coolidge, Arizona. Details of the projects are given in Table 1. All projects in Arizona were funded 100% by the AEC.

#### APACHE COUNTY

### Project AA-1

This project consisted of grading and applying gravel to the Indian Service road which leaves U.S. 666, six miles south of Shiprock, New Mexico and continues westward to Cove Indian School. At Red Rock Trading Post, just inside Arizona, the wagon road northward to Oak Springs was improved. Some 22.3 miles of the project were in Arizona. A total of 57.4 miles of road was improved and/or constructed. These roads provided access to the mines in the Lukachukai Mountains near Cove School and the mines in the eastern Carrizo Mountains near Oak Springs.

#### Project AA-5

This project improved the Indian Service road between Teec Nos Pos Trading Post and Mexican Water Trading Post. West of Mexican Water, a wagon road over Comb Ridge into Cane Valley was greatly improved. This project improved the access for mines in Cane Valley to the mill at Shiprock, New Mexico. Since Vanadium Corporation of America's (VCA) Monument No. 2 mine in Cane Valley shipped ore to the company mill at Durango, Colorado, this project shortened that distance. This project also benefited the mines in the Black Rock Point area of the northwestern Carrizo Mountains.

#### Project AA-7

This project improved 19 miles of a truck trail from just south of Mexican Hat, Utah to the Monument No. 2 mine in Cane Valley. Only 3.5 miles of the project were in Arizona. This project provided better access to Utah State Highway 47 south of Mexican Hat and the route to the mill at Monticello, Utah, for the non-VCA mines in Cane Valley.

#### Project AA-9

This project improved 7.3 miles of the Indian Service road between Red Rock Trading Post and Lukachukai Trading Post. The work was centered where the road crosses the crest of the Lukachukai Mountains, which is now known as Buffalo Pass. The purpose of the project was to improve access to the mill at Shiprock, New Mexico for the mines being developed on Black Mesa near Black Mountain Trading Post.

#### Project AA-44

This project consisted of maintenance on the roads improved by projects AA-5 and AA-7. All but 15.5 miles were in Arizona. Texas-Zinc Minerals Corporation built a mill near the northern end of project AA-7, which began operating in 1957. This mill received very little ore from the mines in Cane Valley.

#### GILA COUNTY

#### Project AA-10

This project improved a Forest Service road which leaves the Globe-Young highway at Board Tree Saddle and descends into the Cherry Creek Canyon, in the Sierra Ancha Range. It continued down Cherry Creek to the Ellison Ranch for a total of 21.1 miles. The road was graded, gravel applied, cattleguards and culverts installed. The purpose of the project was to provide better access to the Globe-Young highway for the mines on the Andy Gump, Big Buck, Black Brush and Horseshoe claims on the west side of Cherry

Creek Canyon.

Project AA-11

This project constructed 6.2 miles of new road from the existing Cherry Creek-Ellison Ranch County Road, northward into the Deep Creek-Bull Canyon area of the Sierra Ancha Range. Gravel was applied to the road and cattleguards and culverts were installed. The road ended in the center of the area of the Sue, Donna Lee, and Lamanite claims, where uranium had been found.

#### SUMMARY

During the period 1952-1956, the AEC improved, and/or constructed, and maintained some 117.8 miles of roads in Arizona. Total cost of this work was approximately \$701,306.00. In Apache County the access roads were important as they provided better access to several mining areas, especially the Lukachukai Mountains, eastern Carrizo Mountains and the Cane Valley area of Monument Valley. In Gila County, the results were disappointing as uranium mining, in the areas of the roads, was very limited.

#### REFERENCE

O'Rear, N.B., 1966, Summary and chronology of the domestic uranium program. U.S. Atomic Energy Commission TM-187, 50 p.

T A B L E

AEC ACCESS ROAD PROGRAM

## APACHE AND GILA COUNTIES ARIZONA

PROJECT NO.	LOCATION	LENGTH (miles)	COSTS	CONST. STARTED	CONST. ENDED.
AA-1	US 666-Cove School and Oak Springs	44.31	\$302,000.00	2/52	4/53
AA-5	Teec Nos Pos- Monument Valley	57.4	209,400.00	10/52	2/54
AA-7	Mexican Hat-Monument No. 2 Mine	19.0 <sup>2</sup>	73,660.00	5/52	2/53
AA-9	Lukachukai Saddle	7.3	135,000.00	5/54	12/55
AA-10	Cherry Creek	21.1	94,098.00	3/56	8/56
AA-11	Deep Creek-Bull Canyon	6.2	40,949.00	1/56	8/56
AA-44	Mexican Hat-Teec Nos Pos	76.43	72,000.00	2/56	12/57
TOTALS		155.3	\$927,107.00		
ARIZONA	TOTALS	117.8	\$701,306.00		

<sup>&</sup>lt;sup>1</sup>Includes 22 miles (50%) in San Juan County, New Mexico <sup>2</sup>Includes 15.5 miles (82%) in San Juan County, Utah <sup>3</sup>Betterment on Projects AA-5 and AA-7, do not add mileage